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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,075	07/10/2001	Kemal Guler	10014768	9384

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EXAMINER
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CHANDLER, SARA M

ART UNIT	PAPER NUMBER
	3693

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/903,075	GULER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sara Chandler	3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 June 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Response to Amendment***

This Office Action is responsive to Applicant's arguments and request for reconsideration of application 09/903,075 (07/10/01) filed on 06/16/06.

***Terminal Disclaimer***

The terminal disclaimer filed on 6/16/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 09/902,928 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor. Joint inventor Tongwei Liu failed to include citizenship.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 9 and 17 are rejected under 35 U.S.C 101 because the invention fails to provide a useful, concrete and tangible result. Specifically, the claims are broad and

the results are not definite. Dependent claims 2-8, 10-16 and 18-24 are similarly rejected.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,9 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are indefinite because: a) The scope of the claims are unclear. Terms such as "structure", "bidding behavior" are broad, abstract concepts. b) There is insufficient correlation or interrelationship among the steps. For example, the limitation "predicting a bidding behavior" does not have any connection to the other steps. For example, in the limitation "predicting a first outcome of said market", the first outcome is not dependent on the market. c) There is no requirement of the claim to produce a result. d) There is no reference to auction format in the claim limitations, it is unclear what the invention is. Dependent claims 2-8, 10-16 and 18-24 are similarly rejected.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 3,4,6,7,8,11,12,14,15,16,19,20,22,23 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Seymour, US Pat. No. 6,871,190.

**Re Claim 1:** Seymour discloses a method for determining an auction format for a market, said method comprising the steps of:

selecting characteristics of said market (See Seymour, Col. 5, lines 31-36);

selecting a relevant bidding model that utilizes information held privately by a bidder and said characteristics of said market (See Seymour, Col. 4, lines 49-51, "A series of bidding and selling strategies are then generated for each type of auction type"; col. 4, line 30+ - col. 5, line 15; col. 6, lines 1-12; col. 6, lines 1-12; col. 3, lines 3-51; col. 4, lines 49-51; col. 6, line 56 - col. 7, line 13);

estimating a structure of said market (See Seymour, Col.4, lines 30-49 and Col. 5, lines 11-15);

predicting a bidding behavior (See Seymour, Col. 5, lines 7-15, The recommendations to the seller and/or bidder regarding how to bid and/or sell is based on a prediction of the bidding behavior of the various bidders);

predicting a first outcome of said market (See Seymour, Col. 6, lines 56-59, "The input data is transmitted to the processing unit of the seller site terminal and the optimum type of auction for sale of such merchandise is determined (e.g., Sealed bid, Vickery, English or Dutch)." In order to determine the optimum auction format the data regarding the auction including the seller, bidders and merchandise is used to evaluate and compare what the predicted outcome would be for each auction format (e.g. Sealed bid, Vickery, English or Dutch);

and evaluating said first outcome of said market (See Seymour, Col. 6, lines 56-59, "The input data is transmitted to the processing unit of the seller site terminal and the optimum type of auction for sale of such merchandise is determined (e.g., Sealed bid, Vickery, English or Dutch)." In order to determine the optimum auction format the data regarding the auction including the seller, bidders and merchandise is used to evaluate and compare what the predicted outcome would be for each auction format (e.g. Sealed bid, Vickery, English or Dutch).

Seymour fails to explicitly disclose a method comprising: selecting a relevant bidding model specifying bidding behavior as a function of information held privately by a bidder and said characteristic of said market

Official Notice is taken that it is old and well-known that information held by a buyer (e.g., amount they are willing to pay, risk tolerance etc.) coupled with their understanding of existing market conditions (e.g., rules, demand etc.) influences behavior. For example, investment decisions, auctions, purchasing decisions.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Seymour to provide a method comprising: selecting a relevant bidding model specifying bidding behavior as a function of information held privately by a bidder and said characteristic of said market

One would have been motivated to make the method adaptable to changing auction environments.

**Re Claim 9:** Seymour discloses a computer system comprising (See Seymour, Figs. 2 and 3, Inherently the computer system of Seymour comprises a bus, memory interconnected to said bus and a processor interconnected with said bus. Figs. 2 and 3 provide a graphical illustration of how the system works) :

a bus (See Seymour, Figs. 2 and 3);

a memory interconnected with said bus (See Seymour, Figs. 2 and 3);

and a processor interconnected with said bus, wherein said processor executes a method for determining an auction format for a market (See Seymour, Figs. 2 and 3), said method comprising the steps of:

selecting characteristics of said market (See Seymour, Col. 5, lines 31-36);

selecting a relevant bidding model that utilizes information held privately by a bidder and said characteristics of said market (See Seymour, Col. 4, lines 49-51, "A series of bidding and selling strategies are then generated for each type of auction type"; col. 4, line 30+ - col. 5, line 15; col. 6, lines 1-12; col. 6, lines 1-12; col. 3, lines 3-51; col. 4, lines 49-51; col. 6, line 56 - col. 7, line 13);

estimating a structure of said market (See Seymour, Col.4, lines 30-49 and Col. 5, lines 11-15);

predicting a bidding behavior (See Seymour, Col. 5, lines 7-15, The language of the patent is interpreted broadly. The recommendations to the seller and/or bidder regarding how to bid and/or sell is based on a prediction of the bidding behavior of the various bidders);

predicting a first outcome of said market (See Seymour, Col. 6, lines 56-59, "The input data is transmitted to the processing unit of the seller site terminal and the optimum type of auction for sale of such merchandise is determined (e.g., Sealed bid, Vickery, English or Dutch)." In order to determine the optimum auction format the data regarding the auction including the seller, bidders and merchandise is used to evaluate and compare what the predicted outcome would be for each auction format (e.g. Sealed bid, Vickery, English or Dutch);

and evaluating said first outcome of said market (See Seymour, Col. 6, lines 56-59, "The input data is transmitted to the processing unit of the seller site terminal and the optimum type of auction for sale of such merchandise is determined (e.g., Sealed bid, Vickery, English or Dutch)." In order to determine the optimum auction format the data regarding the auction including the seller, bidders and merchandise is used to evaluate and compare what the predicted outcome would be for each auction format (e.g. Sealed bid, Vickery, English or Dutch).

Seymour fails to explicitly disclose a computer system comprising: selecting a relevant bidding model specifying bidding behavior as a function of information held privately by a bidder and said characteristics of said market

Official Notice is taken that it is old and well-known that information held by a buyer (e.g., amount they are willing to pay, risk tolerance etc.) coupled with their understanding of existing market conditions (e.g., rules, demand etc.) influences behavior. For example, investment decisions, auctions, purchasing decisions.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Seymour to provide a computer system comprising: selecting a relevant bidding model specifying bidding behavior as a function of information held privately by a bidder and said characteristic of said market

One would have been motivated to make the computer system adaptable to changing auction environments.

**Re Claim 17:** Seymour discloses a computer readable medium for causing a computer system to execute the steps in a method for determining an auction format for a market (See Seymour, Col. 5, lines 6-15, Seymour discloses the use of software usable on a computer readable medium to be executed by a processor), said method comprising the steps of:

selecting characteristics of said market (See Seymour, Col. 5, lines 31-36);

selecting a relevant bidding model that utilizes information held privately by a bidder and said characteristics of said market (See Seymour, Col. 4, lines 49-51, "A series of bidding and selling strategies are then generated for each type of auction

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type"; col. 4, line 30+ - col. 5, line 15; col. 6, lines 1-12; col. 6, lines 1-12; col. 3, lines 3-51; col. 4, lines 49-51; col. 6, line 56 - col. 7, line 13);

estimating a structure of said market (See Seymour, Col.4, lines 30-49 and Col. 5, lines 11-15);

predicting a bidding behavior (See Seymour, Col. 5, lines 7-15, The language of the patent is interpreted broadly. The recommendations to the seller and/or bidder regarding how to bid and/or sell is based on a prediction of the bidding behavior of the various bidders);

predicting a first outcome of said market (See Seymour, Col. 6, lines 56-59, "The input data is transmitted to the processing unit of the seller site terminal and the optimum type of auction for sale of such merchandise is determined (e.g., Sealed bid, Vickery, English or Dutch)." In order to determine the optimum auction format the data regarding the auction including the seller, bidders and merchandise is used to evaluate and compare what the predicted outcome would be for each auction format (e.g. Sealed bid, Vickery, English or Dutch);

and evaluating said first outcome of said market (See Seymour, Col. 6, lines 56-59, "The input data is transmitted to the processing unit of the seller site terminal and the optimum type of auction for sale of such merchandise is determined (e.g., Sealed bid, Vickery, English or Dutch)." The language of the patent is interpreted broadly. In order to determine the optimum auction format the data regarding the auction including the seller, bidders and merchandise is used to evaluate and compare what the

predicted outcome would be for each auction format (e.g. Sealed bid, Vickery, English or Dutch).

Seymour fails to explicitly disclose a computer readable medium for: selecting a relevant bidding model specifying bidding behavior as a function of information held privately by a bidder and said characteristics of said market.

Official Notice is taken that it is old and well-known that information held by a buyer (e.g., amount they are willing to pay, risk tolerance etc.) coupled with their understanding of existing market conditions (e.g., rules, demand etc.) influences behavior. For example, investment decisions, auctions, purchasing decisions.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Seymour to provide a computer readable medium comprising: selecting a relevant bidding model specifying bidding behavior as a function of information held privately by a bidder and said characteristic of said market

One would have been motivated to make the computer readable medium adaptable to changing auction environments.

**Re Claims 3,11 and 19:** Seymour further discloses the method/system/computer readable medium, wherein said selecting a relevant bidding model step comprises the steps of:

receiving said auction characteristics data(See Seymour, Col. 5, lines 29-36);  
accessing a database (See Seymour, Col. 5, lines 21-25, The patent discusses data gathering exercises. A database is being accessed to retrieve the data);

retrieving from said database a relevant bidding model (See Seymour, Col. 4, lines 49-51, "A series of bidding and selling strategies are then generated for each type of auction type"), wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data (See Seymour, Col. 5, lines 11-15, Input data is processed and used to determine the optimum values for the reserve bid price and for the starting bid price); and

outputting said relevant bidding model (See Seymour, Col. 6, lines 56-65, The optimum values for the reserve bid price and for the starting bid price are displayed for the seller).

**Re Claims 4,12 and 20:** Seymour further discloses the method/system/computer readable medium, wherein said estimating a structure of said market step comprises the steps of:  
receiving said relevant bidding model (See Seymour, Col. 4, lines 49-51, "A series of bidding and selling strategies are then generated for each type of auction type");  
receiving said bids data (See Seymour, Col. 5, lines 21-25, The patent discusses data gathering exercises and it can be inferred that a data base is accessed to retrieve the data).

Seymour fails to explicitly disclose a method wherein said estimating a structure of said market step comprises the steps of: expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bid model; transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model;

estimating an estimated latent structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure; and outputting said estimated structure. Official Notice is taken however, that: to express unobservable variables in terms of observable variables; to create a sample of the data; to use the sample to generate a statistical distribution of the sample data; to make estimates or assumptions about the market; and to report upon or generate an output of the results is old and well-known. It is common practice in fields such as mathematics, statistics and economics to use these methodologies for the purpose of using historical data, reasonable assumptions, etc. to make predictions or estimations about the future (e.g., economic predictions, research studies). Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Seymour in light of the Official Notice for the purpose of estimating the structure of said market based on the historical data on record.

**Re Claims 6,14 and 22:** Seymour further discloses the method/system/computer readable medium, wherein said predicting a first outcome of said market step comprises the steps of:

receiving a second user input, wherein said second user input comprises the step of (See Seymour, Col. 6, lines 56-59): an evaluation criterion (See Seymour, Col. 4, line 67, Col. 1-2, Col. 6, lines 56-59, From the language of the patent the evaluation criteria used to determined the optimum type of auction is based on an evaluation of the profit generated or loss incurred); a candidate auction format (See Seymour, Col. 6,

lines 56-59); and a constraint (See Seymour, Col. 6, lines 56-59, The mention of "strategy parameters" is interpreted to mean that there are constraints placed); receiving said estimated structure (See Seymour, Col. 4, lines 30-49 and Col. 5, lines 11-15);

receiving said bidding behavior prediction for said candidate auction format, wherein said bidding behavior prediction further comprises a prediction under said constraint (See Seymour, Col. 5, lines 7-15, The recommendations to the seller and/or bidder regarding how to bid and/or sell is based on a prediction of the bidding behavior of the various bidders);

obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate auction format, and said constraint, said value comprising said first predicted outcome (Seymour, Col. 4, line 67; Col. 5, lines 1-2 and 11-15; Col. 6, lines 56-59, There must be a value for the evaluation criterion (e.g., profit generated or loss incurred) in order to compare the different selling strategies. Further, this value is able to change depending on specific data inputs which influence the estimated structure, bidding behavior prediction, candidate auction format and said constraint); and

outputting said value ((Seymour, Col. 6, lines 63-67, discussion of a display screen and customer confirmation)).

**Re Claims 7,15 and 23:** Seymour further discloses the method/system/computer readable medium, wherein said evaluating said first outcome of said market step comprises the steps of:

receiving a third user input, wherein said third user input comprises a plurality of candidate auction formats (See Seymour, Col. 6, lines 56-59);

Seymour fails to disclose a method wherein said evaluating said first outcome of said market step comprises the steps of: receiving a predicted outcome for each said candidate auction format; calculating descriptive statistics for each said candidate auction format, wherein said descriptive statistics comprise a mean and a variance; ranking each said candidate auction format with respect to said calculated mean and generating corresponding rankings for said plurality; and outputting said descriptive statistics and said rankings. Official Notice is taken that receiving a predicted outcome for different scenarios; calculating statistics for each scenario (e.g., mean, variance); ranking scenarios in ascending or descending order in regards to which is the best option; and reporting upon or generating an output of the results is old and well known. It is common practice in fields such as mathematics, statistics and economics to use these methodologies for the purpose of comparison and decision-making (e.g., product purchase decisions; evaluating business opportunities etc.). Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Seymour in view of the Official Notice for the purpose of evaluating an auction format, comparing different auction formats and ultimately making a decision about the optimal auction format.

**Re Claims 8,16 and 24:** Seymour further discloses a method/system/computer readable medium, wherein said evaluating said first outcome of said market step comprises the steps of:

selecting a best auction format, wherein said best auction format comprises the candidate auction format within said plurality having the highest said ranking (See Seymour, Col. 6, lines 56-59); and

outputting said best auction format (See Seymour, Col. 6, lines 56-59 and Col. 6, lines 63-65. The optimum auction format is determined and displayed on the screen for the seller).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Seymour in view of the Official Notice for the purpose of evaluating an auction format, comparing different auction formats and ultimately making a decision about the optimal auction format.

**Claims 2,5,10,13,18 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Seymour, U.S. Patent No. 6,871,190 in view of Shoham, U.S. Patent No. 6,285,989.

**Re Claims 2,10 and 18:** Seymour further discloses the method/system/computer readable medium as recited in Claim 1, wherein said selecting characteristics of said market step comprises the steps of:

receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned (See Seymour, Col. 6, lines 42-50);

accessing a database (See Seymour, Col. 5, lines 21-25, The patent discusses data gathering exercises. A database is being accessed to retrieve the data); and

retrieving from said database auction characteristics data (See Seymour, Col. 5, lines 29-36),

Seymour fails to explicitly disclose wherein said selecting characteristics of said market step comprises the steps of: retrieving from said database historical bids data; wherein said auction characteristics comprise information relating to historical auctions of similar items; and outputting said auction characteristics data.

Shoham discloses wherein said selecting characteristics of said market step comprises the steps of:

retrieving from said database historical bids data (See Shoham, Col.14, lines 25-32, There is a discussion regarding the retrieval of statistics and results of auctions; and time stamps for the events record of historical data);

retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items (See Shoham, Col. 14, lines 25-32);

outputting said bids data (See Shoham, Col. 14, lines 25-32); and

outputting said auction characteristics data. (See Shoham, Col. 14, lines 25-32).

It would have been obvious to one of ordinary skill in the art to modify the teachings of Seymour to include the teachings of Shoham. As Shoham suggests retrieving data (e.g., historical bids data, auction characteristics data) and outputting data (e.g., bids data, auction characteristics data) is necessary for analysis, auditing and publication. Also, as Shoham suggests the ability to retrieve and output data is beneficial when modifying the software to provide relevant auction formats in different situations. The motivation would have been to continuously improve and adapt the software.

**Re Claims 5,13 and 21:** Seymour further discloses the method/system/computer readable medium, wherein said predicting a bidding behavior step comprises the step of:

outputting a prediction of bidding behavior (See Seymour, Col. 5, lines 7-15, The patent is interpreted broadly. The recommendations to the seller and/or bidder regarding how to bid and/or sell is based on a prediction of the bidding behavior of the various bidders).

Seymour fails to explicitly disclose wherein said bidding model has embedded an unknown structure; wherein said predicting a bidding behavior step comprises the steps of: receiving said estimated structure; receiving said relevant bidding model; and substituting said estimated structure for said unknown structure.

Shoham discloses wherein said bidding model has embedded an unknown structure (See Shoham, Col. 13, lines 48-50, The factors (e.g., rules, constraints) associated with each bidding model allow the specific structure of the market to be changed or augmented. The estimated structure applied generally to each bidding model can be adapted to the unknown structure of a particular auction); and

wherein said predicting a bidding behavior step comprises the steps of:  
receiving said estimated structure (See Shoham, Col. 13, lines 1-6 and lines 32-45 and 38-42. Shoham is interpreted as disclosing that bidding models differ in terms of both the services; and the market and system conditions required. Factors (e.g., rules,constraints) such as minimum bids, bidding increments, length of rounds are

relevant in creating an appropriate structure for the different bidding models). Thus, for each estimated structure received there is relevant bidding model that is also received);

receiving said relevant bidding model (See Shoham, Col. 13, lines 1-6 and lines 32-45 and 38-42. Shoham is interpreted as disclosing that bidding models differ in terms of both the services; and the market and system conditions required. Factors (e.g., rules,constraints) such as minimum bids, bidding increments, length of rounds are relevant in creating an appropriate structure for the different bidding models). Thus, for each estimated structure received there is relevant bidding model that is also received);

and substituting said estimated structure for said unknown structure (See Shoham, Col. 13, lines 48-50, The factors (e.g., rules, constraints) associated with each bidding model allow the specific structure of the market to be changed or augmented. The estimated structure applied generally to each bidding model can be adapted to the unknown structure of a particular auction).

It would have been obvious to one of ordinary skill in the art to modify the teachings of Seymour to include the teaching of Shoham because Shoham teaches a specific way to implement the predicting a bidding behavior step already introduced in Seymour. The motivation would have been to provide sellers and bidders with predictions regarding the bids likely to occur so as to aid their selection of the type of auction format to engage in different market situations.

### ***Response to Arguments***

#### **Double Patenting**

Withdrawn in view of terminal disclaimer (6/16/06).

**Oath/Declaration**

Replacement Oath has not been received.

**Drawings**

Withdrawn in view of amendment (6/16/06).

**Specification**

Withdrawn in view of amendment (6/16/06).

**112**

Withdrawn in view of amendment (6/16/06).

**102/103**

Applicant argues, Seymour fails to disclose or teaches away from selecting a relevant bidding model specifying bidding behavior as a function of information held privately by a bidder and said characteristics of said market;

Although not explicitly stated, the bidding strategy in Seymour (i.e., bidding model) makes selecting a bidding behavior as a function of information held privately by a bidder and said characteristics of said market obvious.

Seymour discloses a bidding model (Seymour, Col. 4, lines 49-51).

In applicant's disclosure the relevance of information, particularly private information, is discussed at various times (See Disclosure, pg. 13, lines 20- pg. 14, line 4; pg. 16, lines 19+ -pg. 17, line 10; pg. 24, lines 18+ - pg. 23, line 3). On, pg. 20 of the disclosure applicant discloses that consideration is made for the distribution of bidders' private information in the decision-making regarding the auctions. Seymour, similarly considers the distribution of bidders' private information by estimating the minimum,

maximum value and valuation range bidders' will likely place on the auctioned items (Seymour, col. 4, line 30+ - col. 5, line 15). On pg.24 of the disclosure applicant provides, as an example of private information, a bidder's willingness to pay for the auction items. Seymour describes a bidding strategy for a bidder that requires data input from the bidder (Seymour, col. 4, lines 1-10). Seymour goes on to describe how the data input includes the price the bidder is willing to pay (Seymour, col. 6, lines 1-12);

Applicant's disclosure discusses the characteristics of the market (See Disclosure, pg. 24, lines 12-16; pg. 25, lines 11-15; pg. 26, lines 17-20). The market is described as comprising two components: market environment (e.g., characteristics of auctioned item see pg..25 of Disclosure) and characteristics of the market mechanism (e.g., English, Dutch, Vickrey etc. pg. 26 of Disclosure). Seymour also provides for characteristics of the auctioned item (Seymour, pg. 6, lines 1-12) and the auction mechanism (Seymour, col. 3, lines 3-51; col. 4, lines 49-51; col. 6, line 56 - col. 7, line 13).

Although the private information and characteristics of the market are not explicitly discussed as being a function of the bidding behavior. It is old and well-known that information held by a buyer (e.g., amount they are willing to pay, risk tolerance etc.) coupled with their understanding of existing market conditions (e.g., rules, demand etc.) influences behavior. For example, investment decisions, auctions, purchasing decisions.

Thus, Seymour makes obvious a bidding model (i.e., bidding strategy) specifying bidding behavior as a function of information held privately by a bidder and said characteristics of said market.

Applicant argues, Seymour fails to disclose predicting a bidding behavior;

The claimed invention is not limited to predicting the behavior of an individual bidder as suggested in pg. 19 of applicant's arguments (6/16/06). The claimed invention states "predicting a bidding behavior" which is broad enough to cover the bidding behavior of all the various bidders. The recommendations to the seller and/or bidder regarding how to bid and/or sell is based on a prediction of the bidding behavior of the various bidders.

Applicant argues, Seymour fails to disclose predicting a first outcome of said market; and evaluating said first outcome of said market.

Applicant's disclosure describes the interrelationship between the bidding behavior, auction format and outcome (See Disclosure, pg. 15, lines 5-17). Similarly, in order to determine the optimum auction format the data regarding the auction including the seller, bidders and merchandise is used to evaluate and compare what the predicted outcome would be for each auction format (e.g. Sealed bid, Vickery, English or Dutch) (Seymour, Col. 6, lines 56-59).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Chandler whose telephone number is 571-272-1186. The examiner can normally be reached on 8-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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